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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/729,039  
Applicant : Williams  
Filed : December 5, 2003  
Title : SOLUBLE RECOMBINANT BOTULINUM TOXIN PROTEINS  
  
TC/A.U. : 1600/1645  
Examiner : PORTNER, V.A.  
  
Docket No. : D2939-CIPCONDIV4

### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Date:

May 13, 2005

By:

### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicant wishes to call to the attention of the Examiner the documents cited on the accompanying Form PTO-1449. The cited documents were either considered in one or more related applications or are applications related to the above-identified application. This communication is being submitted under 37 C.F.R. 1.97(c)(2). The Commissioner is hereby authorized to charge the necessary fee to Deposit Account No. 01-0885.

Each of these documents was cited in related (parent) application Serial No. 10/271,012 filed October 15, 2002. Therefore, no copies of these documents are submitted herewith. Applicant requests that each of these documents be made of record in the above-identified application.

Respectfully submitted,

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Telephone: 949-450-1750

Date: 5/13/05

MAY 17 2005

| Form PTO-1449<br><b>INFORMATION DISCLOSURE CITATION<br/>IN AN APPLICATION</b><br><small>(Use several sheets if necessary)</small>  |  | Docket No.: D2939-CIPCONDIV4  |                 | Application No.: 10/729,039 |          |                            |
|--|--|-------------------------------|-----------------|-----------------------------|----------|----------------------------|
|  |  | Applicant: Williams           |                 |                             |          |                            |
|  |  | Filing Date: December 5, 2003 |                 | Group Art Unit: 1645        |          |                            |
| <b>U. S. PATENT DOCUMENTS</b>  |  |                               |                 |                             |          |                            |
| EXAMINER INITIAL   | DOCUMENT NUMBER  | DATE                          | NAME            | CLASS                       | SUBCLASS | FILING DATE IF APPROPRIATE |
|  | 4,664,911  | 05/1987                       | Uhr et al.      |                             |          |                            |
|  | 5,071,759  | 12/1991                       | Rothman et al.  |                             |          |                            |
|  | 5,196,193  | 03/1993                       | Carroll         |                             |          |                            |
|  | 5,268,295  | 12/1993                       | Serroro         |                             |          |                            |
|  | 5,410,019  | 04/1995                       | Coy et al.      |                             |          |                            |
|  | 5,837,264  | 11/1998                       | Becker et al.   |                             |          |                            |
|  | 5,891,842  | 04/1999                       | Kream           |                             |          |                            |
|  | 5,939,070  | 08/1999                       | Johnson et al.  |                             |          |                            |
|  | 5,989,545  | 11/1999                       | Foster et al.   |                             |          |                            |
|  | 6,022,950  | 02/2000                       | Murphy          |                             |          |                            |
|  | 6,051,239  | 04/2000                       | Simpson et al.  |                             |          |                            |
|  | 6,545,126  | 04/2003                       | Johnson et al.  |                             |          |                            |
|  | 6,787,517  | 09/2004                       | Gil et al.      |                             |          |                            |
| <b>FOREIGN PATENT DOCUMENTS</b>  |  |                               |                 |                             |          |                            |
|  | DOCUMENT NUMBER  | DATE                          | COUNTRY         | CLASS                       | SUBCLASS | TRANSLATION                |
|  |  |                               |                 |                             |          | YES                        |
|  | 93/05800   | 04/1993                       | WO              |                             |          |                            |
|  | 94/13264   | 06/1994                       | WO              |                             |          |                            |
|  | 94/21684   | 09-1994                       | WO              |                             |          |                            |
|  | 95/32738   | 12/1995                       | WO              |                             |          |                            |
|  | 96/05222   | 02/1996                       | WO              |                             |          |                            |
| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>  |  |                               |                 |                             |          |                            |
| AA   | Maisey et al., (1988) Eur. J. Biochem 177:683-691  |                               |                 |                             |          |                            |
| AB   | Rudinger, J. in Peptide Hormones, Parsons, J.A. (Ed.) Univ. Park Press, Baltimore, MD pp. 1-7.                   |                               |                 |                             |          |                            |
| AC   | Roitt, I. Essential Immun., 6 <sup>th</sup> Edition, Blackwell Scientific Publications, Boston, MA, pp. 173-178. |                               |                 |                             |          |                            |
| AD   | LeClerc, C. et al. J. Immunol. 144(8): 3174-3182   |                               |                 |                             |          |                            |
| AE   | Kleid, D.G. Annals NY Acad. Sci. 413:23-30.  |                               |                 |                             |          |                            |
| AF   | Siegel, L.J. Clin. Microbiol. 26: 2351-2356.   |                               |                 |                             |          |                            |
| EXAMINER   |  |                               | DATE CONSIDERED |                             |          |                            |
| EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered.<br>Include copy of this form with next communication to the applicant. |  |                               |                 |                             |          |                            |

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|  | 6,214,602       | 04/2001   | Zdanovsky                     |       |                             |                            |
|  | 6,395,513       | 05/2002   | Foster et al.                 |       |                             |                            |
|  | 6,444,209       | 09/2002   | Johnson et al.                |       |                             |                            |
|  | 6,822,076       | 11/2004   | Bilgalke et al.               |       |                             |                            |
| <b>FOREIGN PATENT DOCUMENTS</b>  |                 |   |                               |       |                             |                            |
|  | DOCUMENT NUMBER | DATE  | COUNTRY                       | CLASS | SUBCLASS                    | TRANSLATION                |
|  |                 |   |                               |       |                             | YES                        |
|  | EP 0 282 042    | 09/1988   | Europe                        |       |                             |                            |
|  | EP 0 593 176    | 04/1994   | Europe                        |       |                             |                            |
|  | GB 2 272 697    | 05/1994   | Great Britain                 |       |                             |                            |
| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>  |                 |   |                               |       |                             |                            |
|  | AG              | Beitle et al.; "One-step purification of a model periplasmic protein from inclusion bodies by its fusion to an effective metal-binding peptide", Biotechnology Progress, Vol. 9, pp 64-69 (1993).                 |                               |       |                             |                            |
|  | AH              | Kamiya et al., "Production of Monoclonal Antibody to Clostridium Difficile Toxin A Which Neutralizes Enterotoxicity But Not Haemagglutination Activity", FEMS Microbiology Letters, Vol. 81, pages 311-316 (1991) |                               |       |                             |                            |
|  | AI              | Hatheway, "Toxigenic Clostridia", Clin. Microbiology Reviews, Vol. 3, No. 1, pages 66-98 (1990)   |                               |       |                             |                            |
|  | AJ              | Coughlin et al., Characterization of six murine monoclonal antibodies specific for toxin B of Clostridium difficile", Hybridoma, Vol. 13, pages 147-152 (1994).   |                               |       |                             |                            |
|  | AK              | Hochuli et al., "Generic approach to facilitate purification of recombinant proteins with a novel metal chelate adsorbent", Biotechnology, Vol. 6, pages 1321-1325 (1988).  |                               |       |                             |                            |
|  | AL              | Lilius et al., "Metal affinity precipitation of proteins carrying genetically attached polyhistidine affinity tails", Eur. J. Biochem., Vol. 198, pages 499-504 (1991).   |                               |       |                             |                            |
|  | AM              | Wiedemann et al., "Chicken egg antibodies for prophylaxis and therapy of infectious intestinal diseases", J. Vet. Med., Vol. 38, pages 283-291 (1991).  |                               |       |                             |                            |
|  | AN              | Handl et al., High yield of active STb enterotoxin from a fusion protein (MBP-STb) expressed in E. Coli", Protein Expression and Purification, Vol. 4, pages 275-281 (1993).                                      |                               |       |                             |                            |
|  | AO              | Von Eichel-Streiber et al., "Cloning of Clostridium difficile toxin B gene and demonstration of high N-terminal homology between A and B", Med. Microbiol. Immunol., Vol. 179, pp 271-279 (1990).                 |                               |       |                             |                            |
|  | AP              | Kim et al, Characterization of protective antibodies in hamsters immunized against Clostridium difficile toxins A and B", Microbial Ecology in Health and Disease, Vol. 2, pp 47-59 (1989).                       |                               |       |                             |                            |
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| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>  |   |      |                               |       |                             |                            |
| AQ   | Zhou et al., "Expression and Purification of the Light Chain of Botulinum Neurotoxin A: A single mutation abolishes its Cleavage of SNAP-25 and Neurotoxicity after reconstruction with the Heavy Chain", Biochemistry, Vol. 34, No. 46, pages 15175-15181 (1995) |      |                               |       |                             |                            |
| AR   | Clayton et al, "Protective vaccination With a Recombinant Fragment of Clostridium Botulinum Neurotoxin Serotype A Expressed from a Synthetic Gene in E Coli", Infection and Immunity, Vol. 63, No. 7, pages 2738-2742 (1995).                                     |      |                               |       |                             |                            |
| AS   | Schiavo et al, "Tetanus and Botulinum-B Neurotoxins Block Neurotransmitter Release by Proteolytic Cleavage of Synaptobrevin", Nature, Vol. 359, pages 832-835 (1992)  |      |                               |       |                             |                            |
| AT   | Krieglstein et al., J. Protein Chem. 1994 Jan; 13(1):49-57.   |      |                               |       |                             |                            |
| AU   | Hutson et al., FEMS Microbiol Lett. 1993 Mar 15; 108(1):103-10.   |      |                               |       |                             |                            |
| AV   | Szabo et al., Appl Environ. Microbiol, 1993, 59(9):3011-3020.   |      |                               |       |                             |                            |
| AW   | Minton et al., "Host: Vector systems for gene cloning in Clostridium", Microbiological Sciences, 5(10):310-315 (1988).  |      |                               |       |                             |                            |
| AX   | Jung et al, "Cloning of a Clostridium botulinum type B toxin gene fragment encoding the N-terminus of the heavy chain", FEMS Microbiol. Lett., 70(1):69-72 (1992).  |      |                               |       |                             |                            |
| AY   | Campbell et al., "Gene Probes for Identification of the Botulinal Neurotoxin Gene and Specific Identification of Neurotoxin Types B, E, and F", Jour. Clin. Microbiology, Vol. 31, No. 9, pages 2255-2262 (1993).   |      |                               |       |                             |                            |
| AZ   | Hauser et al., "Nucleotide sequence of Clostridium botulinum C1 neurotoxin", Nucleic Acids Research, Vol. 18, No. 16, page 4924 (1990).   |      |                               |       |                             |                            |
| BA   | Mierendorf et al, "The pET System: Your choice for Expression", inNovations, Newsletter of Novagen, Inc., Vol. 1, No. 1, pp 1-3, May 1994.  |      |                               |       |                             |                            |
| BB   | Moberg et al., "Affinity Chromatography Purification of Type A Botulinum Neurotoxin from Crystalline Toxin Complex", Applied and Environ. Microbiology, Vol. 35, No. 5, pp 878-880 (1978).  |      |                               |       |                             |                            |
| BC   | Kimura K., English abstract: "The structure and function of botulinum type C neurotoxin", Hokkaido Igaku Zasshi [Article in Japanese], 1991 Nov; 66(6):841-8.   |      |                               |       |                             |                            |
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